

Table 3. Chart to Record Expected Tests Results on Alcohols

<u>Alcohol</u>	<u>BP (°C)</u>	<u>Solubility</u>	<u>Lucas</u>	<u>Chromic Acid</u>	<u>Iodoform</u>	<u>3,5-DNB MP (°C)</u>
Methanol	65	yes	no	yes	no	108
Ethanol	78	yes	no	yes	yes	93
2-Propanol	82	yes	yes	yes	yes	123
2-Methyl-2-propanol	83	yes	yes	no	no	142
1-Propanol	97	yes	no	yes	no	74
2-Propen-1-ol	97	yes	yes	yes	no	49
2-Butanol	100	yes	yes	yes	yes	76
2-Methyl-2-butanol	102	slightly	yes	no	no	117
2-Methyl-1-propanol	108	yes	no	yes	no	87
3-Pentanol	116	slightly	yes	yes	no	101
1-Butanol	118	yes	no	yes	no	64
2,3-Dimethyl-2-butanol	120	slightly	yes	no	no	111
2-Pentanol	120	yes	yes	yes	yes	62
3,3-Dimethyl-2-butanol	120	slightly	yes	yes	yes	107
2-Methyl-2-pentanol	123	slightly	yes	no	no	72
2-Methyl-1-butanol	130	yes	no	yes	no	70
3-Methyl-1-butanol	132	yes	no	yes	no	61
3-Hexanol	136	no		yes	no	97
1-Pentanol	138	slightly	no	yes	no	46
Cyclopentanol	141	slightly	yes	yes	no	115
1-Hexanol	158	no		yes	no	58
Cyclohexanol	160	slightly	yes	yes	no	113
Furfuryl alcohol	172	yes	no	yes	no	81
1-Heptanol	177	no		yes	no	47
Tetrahydrofurfuryl alcohol	177	no		yes	no	83
1-Octanol	195	no		yes	no	61
1-Phenylethanol	204	no		yes	yes	95
Benzyl alcohol	206	slightly	no	yes	no	113

Table 4. Chart to Record Expected Tests Results on Aldehydes and Ketones

<u>Aldehyde or Ketone</u>	<u>BP (°C)</u>	<u>Solubility</u>	<u>2,4-DNPH MP (°C)</u>	<u>Iodoform</u>	<u>Chromic Acid</u>	<u>Purpald[®]</u>
Isobutyraldehyde	64	slightly	187	no	yes	yes
2-Methyl-2-propenal	74	yes	206	no	yes	yes
Butanal	75	no	123	no	yes	yes
2-Methylbutanal	92	no	120	no	yes	yes
Pentanal	103	slightly	98	no	yes	yes
3,3-Dimethylbutanal	103	no	147	no	yes	yes
2-Butenal	104	yes	190	no	yes	yes
Hexanal	131	no	104	no	yes	yes
2-Methyl-2-pentenal	137	no	159	no	yes	yes
Tetrahydrofurfural	142	yes	134	no	yes	yes
Heptanal	155	no	109	no	yes	yes
Furfural	162	yes	212	no	yes	yes
2-Ethylhexanal	163	no	114	no	yes	yes
Benzaldehyde	179	no	237	no	yes	yes
4-Tolualdehyde	204	no	233	no	yes	yes
2-Butanone	80	yes	116	yes	no	no
1-Pentene-3-one	102	yes	129	no	no	no
3-Pentanone	102	slightly	156	no	no	no
3,3-Dimethyl-2-butanone	106	no	125	yes	no	no
4-Methyl-2-pentanone	117	yes	95	yes	no	no
5-Hexene-2-one	132	no	108	yes	no	no
Cyclopentanone	131	slightly	146	no	no	no
4-Heptanone	144	no	75	no	no	no
3-Heptanone	148	no	101	no	no	no
2-Methyl-4-heptanone	150	no	124	no	no	no
Cyclohexanone	156	slightly	162	no	no	no
6-Methyl-2-heptanone	171	no	77	yes	no	no